INSITE
SPECIALIST SERVICES LTD.

DRY, WET ROT, MOULD
AND OTHER COMMON DEFECTS

DRY ROT

1. Hyphae, Mycelium or Strands

Serpula lacrymans the hyphae or strands that you will see if dry rot starts growing appear like roots. They are typically off white or even grey. When they dry out they turn brittle, whereas wet rot would stay flexible.

2. Mycelium or Sheets

Again this is typically off-white but can be yellowish or slightly lilac coloured sheet and forms a skin on the surface of the affected timber.These can also be unseen by the naked eye. They secret enzymes that digest the food (wood) and in turn feeds the organism.

3. Fruiting Body, Mushroom or Sorophore

In its mature state the fruiting body, usually rusty red or ochre yellow with an off white outer edge, of the fungus will produce spores. You will often be able to see the red spores in the middle. Below is only an example.

4. Spores

Spores are the method that Fungi and moulds use to spread from food source to food source in a similar manner to seeds of a plant, they look for the right conditions to start growing. Outside of burning / oxidation they are extremely hard to kill and can lie dormant for 100's or 1,000's of years. Spores often appear to resemble 'brick dust'.

5. Timber Cracking

Deep cracks along the grain of wood and smaller cracks across the grain to form the cube-like structure.
The wood may also shrink and collapse inwards.

Identification: is regularly with the caveats that it could have spread way beyond where the Surveyor has recorded / accessed. A 'Cordon Sanitaire' is recorded and all else excluded from any Guarantee.

In defence of this, it is difficult to see / identify how widespread it has reached even beyond where there is any sign of timber and 'appeared' in an unconnected area near to the current area. If there is a 'damp' smell then you can be assured there are spores propagating somewhere.

Treatment: Typically, you remove all timbers a minimum of 1.5m beyond the last signs of attack and replace timbers with 'Treated timber'.

Where we can / do differ; We will treat / fog the whole area including 'un affected' areas using a unique 'Sporicidal' solution that will oxidise any hidden spores that are available to it. Do not use 'treated timber' as the jury is out on the long term effects / harm from the chemicals used can apply a unique antimicrobial coating to the timber. If the cause has be eliminated and dealt with appropriately there is no need for concern!

WET ROT

Hyphae or Strands

Coniophora puteana the 'cellar fungus' with strands that are dark – grey, brown or black. Fern-shaped patterns are a typical and when dry they remain flexible.

Mycelium or Sheets

Is bright brilliant white more often resembles a skin or coating.

Fruiting body or Mushrooms

The fruiting bodies of wet rot are very small mushrooms / fungi and are off white in colour.

Spores / Dusting

This dusting is not from spores, but from the activity of wood-boring insects which only affect timber which is already rotting. It appears sawdust like.

Timber Cracking

Like the dry rot but tends form smaller and more regular cracking.

Identification: is usually straight forward. A little known fact is that this has been caused by wood swelling and allowing the fungus to enter the area and attack. Consider why timbers can be submerged (untreated) for 100's of years and not rot! As there has been no oxygen or is greatly reduced.
Treatment: Remove all signs of attack and within 1.5m and replace. The use of treated timbers (as with any project) has the benefit from remaining 'rot resistant'however this is not a substitute for proper care and maintenance and again with the concerns surrounding the chemicals / toxins used?
Not all Fungi found in the built environment are wood rotting and care should be taken not to panic into an over reaction and costly repair.

MOULDS

Moulds are fungi and are tremendously important to human society the whole terrestrial ecosystem and the planet we live on. They provide fundamental products including foods, medicines, and enzymes important to industry. They are also the unsung heroes of nearly all terrestrial ecosystems, hidden from view but inseparable from the processes that sustain life on the planet.

It is estimated that there may be anything from 700,000 to 5 million species of Mould/Fungi in the world have been recognised and documented. Even using the most widely cited estimate of 1.5 million, this makes fungi more than ten times as diverse as flowering plants. Yet only about 100,000 species have so far been described.

Fungi are not plantsFungi are important organisms and so distinct from plants and animals that they have been allotted a 'kingdom' of their own in our classifications of life on earth.

Well, at least since 1969 when they were first officially recognized as a distinct group. And more recently, using DNA sequences and comparisons of cell structure, we have learned that Fungi are in fact more closely related to animals than they are to plants. Superficially, they remind us more of plants than animals because they don't move, but scratch the biological surface just a little and that's just about the only thing they have in common.We have found approx. 100 bad Fungi of which 5 or 6 are the really naughty ones which we can elaborate on later. Fungi are surface feeders, producing Mycotoxins and Biotoxins are harmful to the occupiers.
Identification: This can be made simple and straight forward. The 5 or 6 harmful species are ever present in the air that we breathe and safe to assume that following an escape of water or flood then these will be present.
Treatment: For less than 1m2 and you are comfortable that you are not susceptible to the spores and toxins...spray with mild detergent and wipe away. **DO NOT** brush. **DO NOT** use bleach. Greater than 1m2 call an expert and make sure everyone is protected and that they are capable to deal with the heightened level of spores.

We are fortunate to be the only company that can eliminate spores and using methods that allow the property to be re entered within minutes of a treatment.

OTHER COMMON DEFECTS

Blue Stain in Service is a Fungi but is only an aesthetic issue and is not a wood rotting species.
Pyronema domesticum or 'Elf Cup' is a plaster Fungi and feeds on surface detritus or on organic materials in walls and is not a wood rotting Fungus.
Slime moulds feed on bacteria within wood.
Algal growth usually only appears externally e.g. on masonry and requires sunlight, feeding on organic nutrients containing detritus where moisture is prevalent.